

1. (Amended) A multiplexer circuit for switching a selected one of a plurality of current inputs carried by respective input lines to a common output, said circuit comprising, for each input line:

a diode clamp including first and second clamp terminals and first and second clamp diodes arranged in series with the same polarity between said clamp terminals; and

isolation means provided between each input line and said common output,

wherein each input line is connected to the isolation means and to a point between said first and second clamp diodes, and

wherein said diode clamp is operable in two modes, a first mode in which voltages are applied to said clamp terminals such that said diodes of said diode clamp are forward biased and hold said input line at a first voltage which prevents a passage of current from said input line to said common output, and a second mode in which the voltages are applied to said clamp terminals such that said diodes of said diode clamp are reverse biased and said passage of said current from said input line to said common output is allowed.

6. (Amended) An electric device comprising:

an array of charge storage elements that are arranged in rows and columns and which are coupled to row and column conductors, said column conductors being arranged in at least one group, each group having a respective common output;

a multiplexer circuit for switching a selected one of a plurality of current inputs carried by respective input lines to said common output, said multiplexer circuit having, for each input line, a diode clamp with first and second clamp terminals